# Proposals to Implement an Africa RISING Ethiopian – Highlands Research Component

## Research Component

This proposal addresses Research Component 1 (RC1). RC1 will deliver a full characterisation and stratification of households within engaged communities that will be used as a basis for identifying and propagating improved technologies and management strategies. The six key deliverables are:

* Socio-economic community characterization.
* Characterisation of bio-physical environment.
* Household stratification (against socio-economic and biophysical factors)
* Gender analysis.
* Inventory of current practices / technologies and their sources.
* Participatory problem identification and gap analysis.

## Partnerships

**ILRI (lead)**: Expertise in the development and application of a wide range of participatory methods (e.g. for characterisation of resource availability and utilisation and stratification of households within communities); Gender analysis[[1]](#footnote-1) (identification of gender-disaggregated constraints and opportunities and identification of gender-equitable solutions).

**CIP**: Past experience of community situation analysis and action research planning.

**ICRAF**: Resource mapping and formalisation of indigenous knowledge and practises.

**National Partners**: Community engagement; past experience in the use of diagnostic approaches and tools.

## Research Questions / Hypotheses Addressed

**Research Questions**

* What is the minimum dataset (biophysical and socio-economic, quantitative and qualitative) required for effective household characterisation and stratification and to meet the needs of monitoring progress towards AR-EH / FtF development outcomes?
* What is the best approach to mainstreaming household gender considerations so that they inform the selection of technologies and practices for sustainable intensification?
* What is the best way of conducting gap analysis and problem identification for a household based programme of action research for SI?

**Hypotheses**

* Household stratification according to livelihood endowments improves targeting and uptake of technologies.
* Closer targeting leads to better outcomes than simply offering a basket of technologies and allowing farmers to select from amongst these.
* The utility of the minimum dataset can be strengthened by the use of additional spatial layers to improve targeting and later scaling.
* Understanding gender differentiation within households and building innovation around household management partnerships results in solutions that are both more gender-equitable and more adoptable.
* A clear understanding of the sources of technologies and practises currently used by households (and their original uptake pathways) will help in feasibility checking potential SI-related interventions for AR-EH.
* A gap analysis based on participatory / farmer-first approaches is an effective basis for on-farm, adaptive research.

## Approach

**Socio-economic community characterization**

* Participatory household characterisations.
* Basic socio-economic survey of quantitative indicators.
* Livelihoods-based asset characterisation (SLATE).
* Use of AKT5 to formalise indigenous knowledge and practices within the community.
* Creation of baselines for future monitoring and evaluation (relevant to AR-EH outcomes / FtF high level indicators).

**Characterisation of bio-physical environment**

* Identification of a suite of biophysical indicators that can be used to monitor sustainability and productivity changes.
* Development and implementation of a household-level sampling frame across the AR-EH sites.
* GIS-based approaches for strengthening these data.
* Creation of baselines for future monitoring and evaluation (relevant to AR-EH outcomes / FtF high level indicators).

**Household stratification**

* Use of livelihoods asset characterisation (validated by quantitative socio-economic and biophysical indicators) to identify key strata within the community.
* Participatory approaches to interpreting and strengthening asset-based strata.
* Needs assessment for more detailed, household survey based stratifications.

**Gender analysis**

* Study of gender differentiation (constraints and opportunities, roles and responsibilities) within households.
* Identification of potential entry points based on strengthening household management teams.

**Inventory of current practices / technologies and their sources**

* Participatory study of current practices and technologies including mapping of uptake pathways.

**Participatory problem identification and gap analysis**

* Evaluation of livestock production and management practises including the feed resource base (FEAST / Techfit).
* Identification of future visions, challenges and solutions.
* Trade-offs analysis.
* Initial analysis of the criteria that might influence applicability, performance and adoption of technologies and management practices.
* Feed into ex ante impact assessments conducted under RC5.

## Linkages

This is important. The components are intended to structure the programme not to create silos in which teams can operate in isolation. Describe here how your team will manage the linkages (organisational and intellectual) with other AR-EH research components that are addressing complementary deliverables.

**Outgoing**

* Biohysical and socio-economic characterisation will be used to formulate the system level benchmarks under RC2.
* Data from the livelihoods based characterisation / stratification will be used to benchmark individual households against their peers (RC2). This could potentially be developed into an activity for knowledge exchange within the community knowledge groups (also RC2).
* The information on indigenous knowledge and existing practices will be used to identify scaling opportunities for these within communities (RC2).
* Information from RC1 will be required to set up effective innovation platforms under RC4.
* RC1 will provide the menu of options for further prioritization (including *ex ante* impact assessment) and on-farm adaptive research under RC5.

**Incoming**

* Information from the market studies conducted under RC3 will be included amongst the criteria for the gap analysis and evaluating the value of potential SI-related innovations.
* In later years, “feedback” from RC2 - RC6 will be used to refine the analyses conducted under RC1 and to test the validity of the research hypotheses.

## Budget

c. $300 000.

1. - We are hoping to strengthen the gender focus of RC1 in particular and AR-EH in general with inputs from a post-doctoral scientist with 50 *per cent* of their time dedicated to the project (to be recruited by ILRI’s Poverty, Gender and Impacts Team) [↑](#footnote-ref-1)